

DUNIN-BARKOVSKIY, I.V., kand.tekhn.nauk; KARTASHEVA, A.N., kand.tekhn.
nauk

Determining the statistical characteristics of the mass or
thickness of yarn. Tekst.prom. 20 no.8:43-46 Ag '60.
(Thickness measurements) (Yarn) (MIRA 13:9)

DUNIN-BARKOVSKIY, I.V., kand.tekhn.nauk, dotsent; KARTASHEVA, A.N., kand.
tekhn.nauk

Accuracy of methods to determine the position of a contoured surface
mean line. Trudy MATI no.45:27-47 '60. (MIRA 14:1)
(Surfaces (Technology))

DUNIN-BARKOVSKIY, I.V., kand.tekhn.nauk, dotsent

Spectrum analysis of real surface contours prepared by machining.
Trudy MATI no.45:48-73 '60. (MIRA 14:1)

(Surfaces (Technology)--Spectra)
(Metals--Finishing)

DUNIN-BARKOVSKIY, Igor' Valer'yanovich; YEGOROV, V.A., kand. tekhn. nauk, dots., retsenzent; GUREVICH, S.I., kand. tekhn. nauk, dots., red.; KARGANOV, V.G., inzh., red.; CHERNOVA, Z.I., tekhn. red.

[Piezoelectric profilometers and the measurement of surface roughness] P'iezoprofilometry i izmereniia sherokhovatosti poverkhnosti. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 310 p.
(MIRA 14:10)

(Surfaces (Technology))--Measurement)

DUNIN-BARKOVSKIY, I.V.

Determination of parameters and the precision of measurements
of the roughness of surfaces. Trudy Sem.po kach.poverkh.
no.5:181-190 '61. (MIRA 15:10)
(Surfaces (Technology))

~~DUNIN-BARKOVSKIY~~ I.V.
~~DUNIN-BARKOVSKIY~~, I.V.; KARTASHEVA, A.N.

Designing profilometers. Priborostroenie no.7:9-11 J1 '61.
(Electric instruments) (MIRA 14:6)

DUNIN-BARKOVSKIY, I.V., kand.tekhn.nauk, dotsent.

Calculation conditions for finish turning and geometrical parameters
of the cutting tool according to a profile spectrum of the surface
of parts given for operating considerations. Trudy MATI no.53:47-99
'62. (MIRA 15:6)

(Turning)

SEMENIKHIN, P.G.; ~~DUNIN-BARKOVSKIY~~, I.V., kand. tekhn. nauk,
retsenzent; RECHMENSKIY, I.N., kand. tekhn. nauk, red.;
IVANOVA, N.A., red.izd-va; EL'KIND, V.D., tekhn. red.

[Selection of an efficient roughness of machine-part
surfaces] Vybór ratsional'noi sherokhovatosti poverkh-
nosti detalei mashín. Moskva, Mashgiz, 1964. 100 p.
(MIRA 17:3)

YAKUSHEV, A.I., doktor tekhn. nauk, prof.; DUNIN-BARKOVSKIY, I.V.,
doktor tekhn. nauk, dots., retsenzent; ZYABREVA, N.N., kand.
tekhn. nauk, dots., red.

[Interchangeability in the manufacture of machinery] Vzaimo-
zameniaemost' v mashinostroenii. Moskva, Mashinostroenie,
1964. 285 p. (MIRA 17:4)

DUNIN-BARKOVSKIY, I.V.; YAKUSHEV, A.I., doktor tekhn. nauk, prof.,
retsensent; BEZMENOV, A.Ye., kand. tekhn. nauk,
retsensent; KARELIN, N.M., doktor tekhn. nauk, prof., red.

[Principles of interchangeability and technical measurements]
Osnovy vzaimozameniaemosti i tekhnicheskie izmereniia. Mo-
skva, Izd-vo "Mashinostroenie," 1964. 304 p. (MIRA 17:6)

DUNIN-BARKOVSKIY, I.V., doktor tekhn. nauk; RUZIN, M. Ya., kand. tekhn.
nauk

Concerning the roughness of plastic pipes. Vod. i san. tekhn.
no.2:22-24 F '64 (MIRA 18:2)

DUNIN-BARKOVSKIY, I.V.

Applying the probability theory and the spectral theory of
surface roughness to the calculation of safe geometrical
parameters for functional interference capability. Vopr. tekhn.
izm. v mashinostr.; nauch.-tekhn. sbor. no.4835-47 '62
(MIRA 1831)

DUNIN-BARKOVSKIY, I.V.

Using the method of least squares for evaluating the precision
of the technological operation in active control of part di-
mensions. Izv. tekhn. no. 5:10-13 My'64 (MIRA 1787)

DUNIN-BARKOVSKIY, I.V., doktor tekhn. nauk

Interchangeability according to surface roughness. Standartizatsia
28 no.9:18-26 S '64. (MIRA 18:2)

1. Moskovskiy aviatsionnyy tekhnologicheskoy institut.

$$\frac{\text{EAP}(a)}{\text{EPA}(bb)} - 2 \frac{\text{EAP}(b)}{\text{EAP}(1)} \frac{\text{EPA}(c)}{\text{EPA}(c)} \quad \text{PI} = 4 \quad \text{MJD} = 10/21/24$$

DATA STRUCTURE ANALYSIS

L 27862-65

AT5001356

9

expression

...cold hardening was measured by ...
...the degree of cold hardening
was determined by Eng. A. S. Chugunova; the determinations of residual stress were

...or phase heating were developed by Eng. N. A. Meretyakov with the cooperation of
mechanics U. N. Letkin. " Abstractor, J. Zeccola

"APPROVED FOR RELEASE: 08/25/2000

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2011-11-11

THUR: 11-11

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411610005-3"

DUNIN-BARKOVSKIY, I.V.; TUPEYEV, S.Kh.

Roughness spectra of a machined surface and their effect on the durability of turbine blades of a gas-turbine engine. Trudy MATI no.60:72-107 '64. (MIRA 17:11)

SMIRNOV, Nikolay Vasil'yevich; DUNIN-BARKOVSKIY, Igor' Valerianovich;
LAPKO, A.F., red.

[Course in probability theory and mathematical statistics
for technical applications] Kurs teorii veroiatnostei i ma-
tematicheskoi statistiki dlia tekhnicheskikh prilozhenii.
Izd.2., ispr. i dop. Moskva, Nauka, 1965. 511 p.
(MIRA 18:5)

DUNIN-BARKOVSKIY, L.V., inzhener.

Water resources exhibits in pavilions of Soviet Republics of
Central Asia at the All-Union Agricultural Exhibition. Gidr. i
mel. 6 no.8:17-21 Ag '54. (MLRA 7:9)

(Soviet Central Asia--Water resources development) (Water
resources development--Soviet Central Asia) (Moscow--
Agricultural exhibitions) (Agricultural exhibitions--Mos-
cow)

DUNIN-BARKOVSKIY, L. V.

Dunin-Barkovskiy, L. V.

"Problems of the Methodology of Planning Water-Economy Measures for the Modern Complex Utilization of the Water and Land Resources of Neighboring River Basins (On the Example of the Basins of the Zeravshan and Kashka-Dar'ya Rivers)." Tashkent Inst of Engineers of Irrigation and Mechanization of Agriculture. Tashkent, 1955. (Dissertations for the Degree of Candidate in Technical Sciences).

SO: Knizhnaya Letopis', No. 27, 2 July 1955

DUNIN-BARKOVSKIY, L.V.

Water balance of an irrigated region. Izv.AN SSSR. Ser.
geog. no.5:61-73 S-O '56. (MLRA 9:11)

1. Vsesoyuznyy gosudarstvennyy institut po proyektirovaniya
vodokhozyaystvennogo i meliorativnogo stroitel'stva.
(Irrigation) (Hydrology)

DUNIN-BARCOVSKIY, L.V., kandidat tekhnicheskikh nauk.

Development of irrigation and improvement of lands in the Near East
countries. Gidr. i mel. 8 no.7:53-60 J1 '56. (MLRA 9:9)
(Near East--Irrigation) (Near East--Drainage)

DUNIN-BARKOVSKIY, L.V., kandidat tekhnicheskikh nauk.

"Irrigation in the world" [in English]. H.D.Gulhati. Reviewed by L.V.
Dunin-Barkovskii. Gidr.i mel'8 no.10:49 0 '56. (MLRA 9:10)
(Irrigation)

~~DUNIN-BARKOVSKIY, L.V.~~, kandidat tekhnicheskikh nauk.

Irrigation in Indonesia and Ceylon. Gidr. i mel. 8 no.11:58-59
N '56 (MIRA 10:4)
(Indonesia--Irrigation) (Ceylon--Irrigation)

DUNIN-BARKOVSKIY, L.V.

NIKOLAYEVSKAYA, Ye.M.
3(4) 1-3 PAPER I BOOK EXPLANATION 207/179
Akademiya nauk SSSR. Institut geografii.

Izvestiya topograficheskikh kart pri geograficheskikh issledovaniyakh. (Vse of Topographic Maps in Geographical Exploration) Moscow, Izd-vo AN SSSR, 1958, 118 p. 2,000 copies printed.

Reprint. Ed.: E.P. Leont'yev, Candidates of Technical Sciences; Ed. of Publishing House: V.S. Volynskaya, Tech. Ed.: S.G. Krasovskiy

FOREWORD: This book is intended for geographers or cartographers who use topographic maps in connection with their activity.

CONTENTS: This book is a collection of papers given at the International Conference on Topographic Maps called by the Institute of Geography, Academy of Sciences, USSR in 1955. The aim of the conference was to discuss and solve problems in the use of maps and to find means of improving the contents of maps. Included in the papers are discussions of map making methods, contents of Soviet maps, the use of maps for physico-

Card 1/4

geographical studies, the classification of topographic maps, and others. A portion of the book is devoted to a discussion of the papers presented. The author thanks E.S. Kharukhin, E.S. Fedobedov, and L.Ye. Setunskiy for their help in preparing the work for publication. Each article is followed by a list of references.

Use of Topographic Maps (cont.)

- Fedobedov, E.S. Some Problems in the Use of Topographic Maps for the Physical Geographic Study of the USSR 37
- Shchegoleva, Ye.M. The Requirements Set Forth for Topographic Maps in Connection With Integrated Geographical Studies of Soviet Regions in European USSR 46
- Samstov, O.A. The Use of Topographic Maps in the Study of Virgin and Unutilized Lands 56
- Meshcheryakov, Ya. A. The Requirements for Topographic Maps in Geomorphological Studies 62
- Prokof'yev, P.I. The Classifications of Topographic Maps and the Improvement of Their Contents 75
- Dunin-Barkovskiy, L.V. Some Considerations for Improving Topographic Maps in Connection With Their Use in Planned Water Utilization Projects 87

Card 1/4

DUNIN-BARKOVSKIY, L.V.

AUTHOR: Dunin-Barkovskiy, L.V., Engineer, 99-58-6-10/11

TITLE: The 50th Anniversary of the American **Society** of Agricultural Engineers (Pyatidesyatiletie amerikanskogo obshchestva sel'skokhozyaystvennykh inzhenerov)

PERIODICAL: Gidrotekhnika i Melioratsiya, 1958, Nr 6, pp 59-63(USSR)

ABSTRACT: The author gives a historical review of technical developments in the US agricultural field as illustrated in a special edition of the journal "Agricultural Engineering" on the occasion of the 50th anniversary of the American **Society** of Agricultural Engineers. There is 1 map, 4 photos, and 1 American reference.

AVAILABLE: Library of Congress
Card 1/1 1. Agriculture-USSR-Progress

DUNIN-BAKOVSKIY, I.V., kand.tekhn.nauk dots.

Using piezoelectric techniques in measuring surface roughness.

Vest. mash. 38 no.7:61-62 JI '58.

(MIRA 11:8)

(Surfaces (Technology)--Measurement)

(Oscillators, Crystal)

DUNIN-BARKOVSKIY, Lev Valerianovich; GELLER, S.Yu., doktor geograf.
nauk, red.; YERMILOV, L.T., red.; PECHENKIN, I.V., tekhn.red.

[Physicogeographical principles of planning irrigation systems;
zoning and water balance of the irrigated territory] Fiziko-
geograficheskie osnovy proektirovaniia orositel'nykh sistem;
raionirovanie i vodnyi balans oroshaemoi territorii. Pod red.
S.IU.Gellera. Moskva, Izd-vo M-va sel'skogo khoz.SSSR, 1960.
166 p. (MIRA 13:8)

(Irrigation)

DUNIN-BARKOVSKIY, L. V., Dr.Geogr. Sci. (diss) "Physical Geographic Bases of Planning of Irrigation Systems," Moscow, 1961, 15 pp (Instit. of Geogr., Acad. of Sci., USSR) 150 copies (KL Supp 12-61, 257).

DUNIN-BARKOVSKIY, L.V.; KUNIN, V.M.

Transforming the nature of Central Asian deserts. Izv. AN SSSR.
Ser. geog. no.5:70-75 S-O '61. (MIRA 14:9)

1. Institut geografii AN SSSR i Giprovdokhoz Ministerstva
sel'skogo khozyaystva SSSR.

(Soviet Central Asia--Irrigation farming)

(Soviet Central Asia--Deserts)

ASKOCHENSKIY, A. N. And DUMIN-BARKOVSKIY, L. V.

"Integrated river basin development in the Republics of Central Asia"

report to be submitted for the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas - Geneva, Switzerland, 4-20 Feb 63.

DUNIN-BARKOVSKIY, L. V., doktor geograficheskikh nauk

Using modern computing systems in designing hydraulic develop-
ments. Gidr. i mel. 15 no.3:48-52 Mr '63.

(MIRA 16:4)

(United States--Water resources development)
(Electronic computers)

DUNIN-BARKOVSKIY, L.V.; KUNIN, V.N.

Australian symposium on water resources., Izv. AN SSSR Ser.
geog. no.4:146-152 *64 (MIRA 17:8)

ASKOCHENSKIY, A.N., akademik; DUNIN-BARKOVSKIY, L.V. doktor geogr. nauk

Archeological and geomorphological studies of soils in Central
Asia and Kazakhstan irrigated in the remote past. Gidr. i mel.
16 no.11:46-47 N '64 (MIRA 18:2)

DUNIN-BARKOVSKIY, L.V.

Water exchange and water resources. Izv. AN SSSR Ser. geog. no.1:
113-118 Ja-F '65. (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhniki i
melioratsii im. A.N. Kostyakova.

DUNIN-BARKOVSKIY, R. L. Cand Geol-Min Sci--(diss) "Mineralogy and certain features of ^{the} geochemistry of the Lashkerek silver-~~and~~ lead deposit." Tashkent, 1959. 26 pp (Inst of Geology, Acad Sci UzSSR. Department of Mineralogy and Geochemistry), 175 copies (KL, 41-59, 103)

DUNIN-BARKOVSKIY, R.L.

Silver potential of the Lashkerek deposit. Uzb.geol.zhur.
no.2:62-67 '59. (MIRA 12:8)

1. Institut geologii AN UzSSR.
(Kurama Range--Silver ores)

DUNIN-BARKOVSKIY, R.L.

Tetrahedrite ores in the Lashkerak silver-lead-zinc deposit.

Zap.Uz.otd.Vses.min.ob-va no.13:104-111 '59.

(MIRA 13:7)

(Kurama Range--Tetrahedrite)

DUNIN-BORKOWSKI, Jan; MACZYNSKI, Stanislaw

Application of interference filters for spectrophotometric measurements.
Chem anal 7 no.2:517 -525 '62

1. Department of General Physics C, Faculty of Chemistry, Polytechnical College, Warsaw.

ARSHAVSKIY, Yu.I.; BERKINBLIT, M.B.; DUNIN-BARKOVSKIY, V.L.

Distribution of impulses in a ring of stimulated tissue.
Biofizika 10 no.6:1048-1054 '65. (MIRA 1961)

1. Institut biologicheskoy fiziki AN SSSR, Moskva. Submitted
July 5, 1965.

L 40232-66 EWP(v)/ENP(j)/ENP(t)/ETI/ENP(k)/ENP(h)/ENP(l) LJP(c) RM/JD

ACC NR: AP6018754

SOURCE CODE: PO/0034/66/000/001/0008/0011

AUTHOR: Dunin-Borkowski, Jan (Master Engineer); Stefan Sękowski (Master of Arts) ⁶⁵₆₃

ORG: None _R

TITLE: The eloxameter--an instrument for nondestructive measurement of the thickness of carbon films on aluminum and aluminum alloys

SOURCE: Pomiary, automatyka, kontrola, no. 1, 1966, 8-11

TOPIC TAGS: microelectronic thin film, electronic measurement, carbon

ABSTRACT: The authors discuss a method developed at the Institute of Precision Me-
chanics in 1962-63 for determining the thickness of carbon films on aluminum and alumi-
num alloys by measuring the breakdown voltage. This method may be considered nonde-
structive for all practical purposes if the dimensions and shape of the sensing elec-
trode and the electrical parameters are properly selected since the breakdown point
will be immediately covered with a new carbon film. It is experimentally established
that a single-pole probe should have a spherical sensing element 8-10 mm in diameter
with a pressure of 60-80 grams on the specimen. The basic circuit for application of
the proposed method is shown in the accompanying diagram. A prototype of an instrument
based on this method, the eloxameter, was designed and built by the Department of

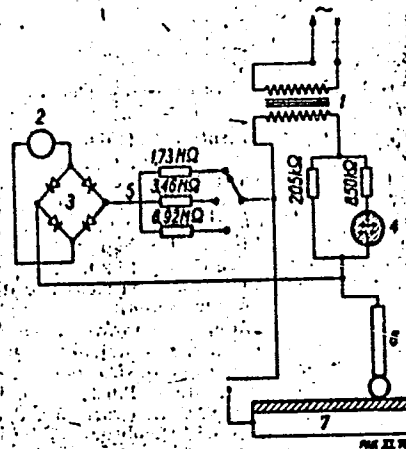
Card 1/2

UDC: 539.23:531.717.11.669.718

L 40832-66

ACC NR: AP6018754

Physics in the Division of Chemistry, Warsaw Poly-technical Institute. In addition to breakdown voltage, this device also measures the current flowing through the carbon film. The value of this current is a function of the actual resistance of the film which gives an index of its thickness and structure. A zero-beat detector which is sensitive to changes in phase is used for balancing the capacitive current component. The signal at the output of the detector is proportional to the part of the applied a-c voltage which is in phase with the comparison voltage. The phase of the comparison voltage is chosen so that the instrument shows only the real current component. The eloxameter is a general-purpose instrument with practical applications for studying other types of insulating films in addition to carbon. Orig. art. has: 9 figures.¹⁵



1--power supply; 2--voltmeter;
3--rectifier; 4--breakdown in-
dicator; 5--range selector;
6--probe; 7--specimen

SUB CODE; 09, 11/ SUBM DATE; none/ ORIG REF: 006/ OTH REF; 001

Card 2/2 *MLP*

DUNIN-HORKAWICZ, H.

GANCZARSKI, A.; DUNIN-HORKAWICZ, H.; HOROSZEWICZ, J.; KASPEROWICZ, J.; ORLOWSKA, I.;
STEMPIEN, E.; TUROWSKA, I.; WISNIEWSKA, A.

Effect of isonicotinic acid hydrazide on morphology and biology
of Mycobacterium tuberculosis, on saprophytic bacteria, and on
experimental tuberculosis in laboratory animals. Med. dosw. mikrob.
5 no.3:326-329 1953. (CIML 25:5)

1. Lodz.

EXCERPTA MEDICA Sec.4 Vol.9/7 Microbiology,etc. July56

1648. DUNIN-HORKAWICZ H., KRAJ-FRANCOWA I. and SADOWSKA M. Zakł. Bakteriol. A.M., Łódź; II. Klin. Chor. Dziecięcych A.M., Łódź. *Rola pałeczki okrężnicy w etiologii biegunek dziecięcych. The role of Bacterium coli in aetiology of infantile diarrhoea PEDIAT. POL. 1955, 30/3 (217-220)

The frequency of cultures of Bacterium coli type alpha and beta from the faeces of children suffering from diarrhoea (50.13%) in comparison to the small percentage (up to 3.25%) in the control groups makes it possible to consider these organisms as the aetiological factor.

From authors' summary (XX, 7, 4)

DUNIN - HORKAWICZOWA, H.

DUNIN-HORKAWICZOWA, H., KRAJ-FRANCOWA, I. SADOWSKA, M.

Epidemic of infantile diarrhea caused by bacteria coli beta type
in two nurseries. *Pediat.polska* 30 no.3:271-282 Mr '55.

1. Z II Kliniki Chorob Dzieci A.M. w Lodzi, Kierownik: prof. dr
med. Fr. Redlich, 1 Zakladu Bakteriologii A.M. w Lodzi, Kierownik:
prof. dr med. Z. Szymanowski, Lodz, Nowotki 137, Zaklad Bakteriologii
A.M.

(DIARRHEA, bacteriology

E. Coli, serol. beta type, epidemic in inf.)

(ESCHERICHIA COLI, infections

diarrhea, caused by serol. type beta, in inf.)

~~DUNIN-HORKAWICZ~~
1842. ROLE OF ALPHA AND BETA TYPE ESCH. COLI IN INFANTILE ENTERO-
COLITIS - Rôle de l'Eschérichia coli des types alpha et bêta dans l'entéro-
colite du nourrisson. Statistique et observations épidémiologiques, cliniques
et thérapeutiques - Dunin-Horkawicz H., Kraj-Franc I. and
Sadowski M. Acad. Méd., Deuxième Clin. des Mal. Infant., Inst. de
Bactériol., Łódź - PEDIATRIE 1957, 12/7 (765-773)

The faeces of 345 infants suffering from enteritis and of more than 1000 controls
was examined bacteriologically, by the disc technique. The incidence of alpha
(OIII B4) and beta (OIII B5) type Esch. coli was 50% in the first group and 3.5% in
the second. The sensitivity to antibiotics of the strains was most marked against
chloramphenicol and chlortetracycline, but it varied not only from one case to
another but also with time, in the same patient. This makes it necessary to re-
peat the examination in each case. Véghelyi - Budapest (L, 7, 4)

DUNIN-HORKAWICZOWA, H.; KRAJ-FRANCOWA, I.; SADOWSKA, M.

Importance of early determination of antibiotic sensitivity in bacterial flora of alimentary canal in therapy of infantile diarrhea. *Pediat. polska* 32 no.2:143-149 Feb 57.

1. Z II Kliniki Chorob Dzieci A.M. w Lodzi Kierownik: prof. dr. med. Fr. Redlich z Zakladu Bakteriologii A.M. w Lodzi Kierownik: prof. dr. med. Z. Szymanowski. Adres: Lodz, ul. Armii Czerwonej 15.

(DIARRHEA, in inf. & child
ther., antibiotics, importance of early determ. of
bact. sensitivity (Pol))

(ANTIBIOTICS, ther. use
diarrhea in child, importance of early determ. of bact.
sensitivity (Pol))

DUNIN-HORKAWICZ, H.

EXCERPTA MEDICA Sec 7 Vol.12/9 Pediatrics Sep 58

2397. THE ACTION OF ANTIBIOTICS IN VIVO AND IN VITRO ON E. COLI TYPES ALPHA AND BETA, OBTAINED FROM CASES OF INFANTILE DIARRHOEA -

Wplyw antybiotyków in vivo i in vitro na pałeczki okrężnicy typu alfa i beta z przypadków biegunek niemowlęcych - Dunin-Horkawicz H.,

Kraj-Francowa I. and Sadowska M. Zakt. Bakterirol. Mi II. Klin. Chor. Dzieci A.M., Łódź - PEDIAT. POL. 1957, 32/12 (1319-1327)

The in-vitro sensitivity to antibiotics has been determined in 150 strains of E. coli type alpha (O111 B4) and beta (O55 B5), about a third being obtained from cases of infantile diarrhoea. All the strains were penicillin-resistant, 136 were resistant to streptomycin, 23 to chloramphenicol and 26 to chlortetracycline. The results of treatment with proper antibiotics prove the aetiological significance of these types of colon bacilli in infantile diarrhoea. (IV, 7)

DUNIN-HORKAWICZ, Helena

~~Role of the skin and effect of supplementary stimuli on the course of~~
experimental Bacillus anthracis infection. Med. dosw. mikrob. 10 no.2:
241-246 1958.

1. Z Zakladu Bakteriologii A. M. w Lodzi Kierownik: prof. dr Z. Szymanow-
ski Kierownik: Z-ca prof. dr med. A. Ganczarski.

(ANTHRAX, experimental,

eff. of intradermal admin. of bacilli & skin inj. (Pol))

(SKIN, physiology,

eff. of inj. & intradermal admin. of bacilli on exper.
anthrax (Pol))

POLAND

DUNIN-HORKAWICZ, Helena, MALECKA, Irena, and SADOWSKA, Maria,
Department of Bacteriology (Zaklad Bakteriologii) (Director:
Docent, Dr. med. A. GANCZARSKI) and Chair of Pediatrics (Ka-
tedra Pediatrii) (Director: Prof., Dr. med. E. REDLICH),
AM [Akademia Medyczna, Medical Academy] in Lodz.

"Serologic Reactions in Infant-Diarrhea Caused by E. Coli
Type Alpha and Beta."

Warsaw, Medycyna Doswiadczalna i Mikrobiologia, Vol 15, No
2, 63, pp 159-166.

Abstract: [Authors' English summary modified] Tests for E.
coli in the stool and for specific serum antibodies in 160
cases of infant-diarrhea lead the authors to the conclusion
that these tests can be used for diagnosis, that serological
tests are more reliable than the bacteriological ones, and
that the passive hemagglutination and indirect hemolysis
tests are sensitive enough to be considered reliable. The
43 cited references include one Russian, about 15 Polish,
and the others Western.

1/1

DUNIN-HORKAWICZ, Helena; MALECKA, Irena; SADOWSKA, Maria

Serological reactions in infantile diarrhea caused by strains of *Escherichia coli* types alpha and beta. (The reaction of bacterial agglutination, passive hemagglutination and intermediate hemolysis). Med. dosw. mikrobiol. 15 no.2:159-166 '63.

1. Z Zakladu Bakteriologii AM w Lodzi Kierownik: doc. dr med.
A. Ganczarski i z Katedry Pediatrii Kierownik: prof. dr med.
E. Redlich.

(DIARRHEA, INFANTILE)
(*ESCHERICHIA COLI* INFECTIONS)
(AGGLUTINATION) (HEMOLYSIS)

DUNIN, M., prof.

In the Department of Agricultural Phytopathology. Zashch. rast.
ot vred. i bol. 10 no.12:11-13 '65. (MIRA 19:1)

1. Zaveduyushchiy kafedroy sel'skokhozyaystvennoy fitopatologii
Moskovskoy ordena Lenina sel'skokhozyaystvennoy akademii im.
Timiryazeva.

SHAMOVSKIY, L.M.; DUNINA, A.A.; GOSTEVA, M.I.

Conductivity of silver bromide in the presence of bromine. Zhur.
eksp.i teor.fiz. 30 no.4:640-648 Ap '56. (MLBA 9:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'-
ya.

(Silver bromide--Electric properties)

9. Hole conductivity is low.

formed "holes" when heated to 100°C.

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411610005-3

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411610005-3"

Dokl.Akad.Nauk, 111, fasc.4,811-814 (1956) CARD 2 / 2 PA - 1909

The conductivity of a KJ(Tl)-phosphorus with 0,01 ; 0,1 and 10 weight percents of TlJ.

Conclusions drawn from experimental results: If small quantities of TlJ are added, the structure-sensitive conductivity of KJ-crystals diminishes rapidly. This is equivalent to a lower cooling of pure crystals. The considerable decrease of cation conductivity diminishes the yield of photolysis processes and increases the efficiency of luminescence. The presence of an activator in the crystal does not bring about an essential change of the equilibrium concentration of structural defects and their mobility, but these defects (vacant cation- and anion nodes) are less constant in phosphorus as localization levels of holes and electrons, because deeper electron-acceptor levels (barrier layers on contact surfaces) exist. In the case of considerable concentrations of the activator the conductivity of the crystal increases sharply, particularly in the structure-sensitive domain. On this occasion extinction, which is due to concentration, occurs. At low temperatures the not activated crystals have the typical properties of phosphors because then ion conductivity decreases. They are then also able, on certain conditions, to luminesce. The rules found on this occasion indirectly confirm existing conceptions of the mechanism of luminescence which were developed in consideration of the microheterogeneous structure of the phosphors.

INSTITUTION: All Soviet Institute for Mineral Raw Materials.

DUNINA, A.A.

51-5-8/26

AUTHORS: Shamovskiy, L.M., Dunina, A.A. and Zhvanko, Yu.N.

TITLE: The Structure of the Alkali Halide Phosphors and the Mechanism of the Processes of their Luminescence.
(Struktura shchelochno-galoidnykh fosforov i mekhanizm protsessov lyuminestsentsii)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.2, Nr 5, pp.599-605
(USSR)

ABSTRACT: The authors study the interaction of electrons and holes with the activator in phosphors. Their results can be given by the band model proposed by Lambe and Klick (14). The latter two authors report luminescence as recombination of holes with electrons localised on the activator in the process of excitation of the phosphor. The authors of this paper supplement this model by limiting the possibility of such recombination to the activator which is situated on contact surfaces. The effect of the activator on the electrical conductivity was studied in crystals of KI and KI-Tl grown in vacuum. These samples were placed between platinum electrodes and heated in electrical furnaces. Their electrical conductivity was measured at 1000 c/s. Dependence

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51-5-8/26

The Structure of the Alkali Halide Phosphors and the Mechanism of the Processes of their Luminescence.

of the electrical conductivity on temperature is given in Fig.2. For pure KI (curve 1) the values in Fig.2 agree with those given in Ref.23. Straight line 2 in Fig.2 is an extrapolation of the intrinsic conductivity of pure KI to low temperatures. Curves 3, 4 and 5 give the conductivity of the KI-Tl phosphor with 0.01% by weight of Tl, 0.1% Tl and 10% Tl respectively. The results indicate that small amounts of Tl in KI decrease the structure-sensitive conductivity of the crystals. These effects are equivalent to strong cooling of KI. The luminescence of the pure crystals and of the phosphors is similar in nature. In both cases the contact surfaces are the places of localisation of electrons and holes which then recombine to emit radiation. The activator changes the properties of the contact surfaces by forming deeper levels of electron localisation. This changes the emission spectrum of the crystal. Small additions of the activator do not materially affect the intrinsic conductivity of the crystals. At high activator concentrations the structure-sensitive conductivity increases. Simultaneously ultraviolet luminescence yield decreases and emission in the visible spectrum becomes

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51-5-8/26

The Structure of the Alkali Halide Phosphors and the Mechanism of the Processes of their Luminescence.

stronger.

There are 2 figures, 23 references, of which 7 are Slavic.

SUBMITTED: October 6, 1956.

AVAILABLE: Library of Congress.

Card 3/3

DUNINA A.A.

48-5-18/56

SUBJECT: USSR/Luminescence

AUTHORS: Shamovskiy L.M., Dunina A.A. and Zhvanko Yu.N.

TITLE: Structure of Alkali-Haloid Phosphors and Mechanism of Luminescence processes (Struktura shchelochno-galoidnykh fosforov i mekhanizm protsessov lyuminestsentsii)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #5, pp 675-677 (USSR)

ABSTRACT: Investigations carried out have shown that:

1. In the presence of holes (and V-centers) the position, shape and intensity of activator bands in alkali-haloid phosphors remains unchanged;
2. On the contrary, the activator localizes electrons. At that, additional absorption bands completely disappear, and at the same time the crystal loses its ability to be luminescent. It was established that the centers of electron localization are in the contact surfaces of polyhedral structure of phosphors.
3. Ions of an activator in the lattice nodes are neither donors nor acceptors of electrons and therefore, take no immediate part in the phenomena of luminescence.

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48-5-18/56

TITLE: Structure of Alkali-Haloid Phosphors and Mechanism of Luminescence processes (Struktura shchelochno-galoidnykh fosforov i mekhanizm protsessov lyuminestsentsii)

4. A new energy model of alkali-haloid phosphors is proposed which takes into account their microheterogeneous structure.

5. A connection between photochemical and luminescent properties of crystals has been established.

6. A dependence of electroconductivity of KJ and KJ(Tl) on temperature and composition has been investigated. It was shown that the maximum in the luminescence spectrum of pure NaJ (band at $303 \text{ m}\mu$) corresponds to the energy of interaction of localized electrons and holes in the contact surface.

The report was followed by a discussion.
One Russian reference is cited.

INSTITUTION: All-Union Scientific Research Institute of Mineral Raw Materials.

PRESENTED BY:

SUBMITTED: No date indicated;

AVAILABLE: At the Library of Congress.
Card 2/2

DUNINA, A.A.

51-4 -1-19/26

AUTHORS: Dunina, A. A., Morgenshtern, Z. L. and Shamovskiy, L. M.

TITLE: Absorption and Luminescence Spectra of Indium-Activated Alkali-Halide Monocrystals. (Spektry pogloshcheniya i lyuminestsentsii shchelochno-galoidnykh monokristallov, aktivirovannykh indiyem.)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol. IV, Nr. 1, pp. 105-109. (USSR)

ABSTRACT: Zhvanko, Morgenshtern and Shamovskiy (Ref.4) studied KI phosphors activated with thallium, indium and gallium, and showed that the absolute quantum yield in KI-In is very high (of the order of 0.95). The present communication reports investigation of the absorption, excitation and luminescence spectra of monocrystals of sodium, potassium, rubidium and caesium chlorides, bromides and iodides, all activated with indium. Monocrystals were produced from melt in sealed quartz ampoules (Ref.8). The activator was

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51-4 -1-19/26

Absorption and Luminescence Spectra of Indium-Activated Alkali-Halide Monocrystals.

introduced in metallic form or as a univalent salt with the same anion as the base. The absorption spectra were measured on polished plates using a C Φ -4 spectrophotometer. Below 220 m μ , measurements were made using a hydrogen lamp (supplied by I. A. Prager), a vacuum monochromator with mirrors and a fluorite prism. A photomultiplier $\Phi \ni \Upsilon$ -19 with a luminescent light convertor and an amplifier was used as the receiver. To measure absorption spectra the crystal was placed in front of the entrance slit of the monochromator. The excitation spectra were measured on a C Φ -4 spectrophotometer, using a

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Absorption and Luminescence Spectra of Indium-Activated Alkali-Halide Monocrystals.

$\Phi\Xi\Upsilon$ -19 photomultiplier and an amplifier. The emission spectra excited by light in the activator bands were measured on a $\Upsilon\mathcal{M}$ -2 monochromator with a $\Phi\Xi\Upsilon$ -19 photomultiplier and an amplifier. When the emission spectrum was in the ultraviolet region measurements were also made using a Hilger quartz monochromator and $\Phi\Xi\Upsilon$ -19. The absorption spectra for the monocrystals studied are shown in Fig.1. The positions of the absorption maxima are given in the table on p.107. All spectra exhibit a long-wavelength absorption band (I) and a more intense short-wavelength band (II). For iodides a third (III) band is observed. Bands I and II are displaced towards long wavelengths on transition from chlorides to

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51-4-1-19/26

Absorption and Luminescence Spectra of Indium-Activated Alkali-Halide Monocrystals.

iodides. The absorption coefficient of the long-wavelength band increases with increase of the activator concentration somewhat faster than in the short-wavelength band. CsCl-In samples break up into small crystals in mechanical preparation. For this reason the absorption spectrum of CsCl-In was estimated from the spectral distribution of photo-excitation. The excitation spectra for all the phosphors studied are in general similar to the absorption spectra. By way of an example the excitation spectra of KCl-In, RbBr-In and CsI-In are given in Fig.2. The emission spectra are shown in Fig.3. The maximum of the emission band is displaced towards long wavelengths on

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Absorption and Luminescence Spectra of Indium-Activated Alkali-Halide Monocrystals. 51-4.-1-19/26

transition from chlorides to iodides. The results obtained were compared with similar results for the same phosphors activated with thallium (Ref.2). In general, the results are similar for In and Tl activators. The absorption bands of indium-activated phosphors occur at longer wavelengths than the absorption bands of thallium-activated phosphors. Furthermore, for indium-activated phosphors the authors found considerable splitting of the absorption bands even at room temperature, while for thallium-activated phosphors such splitting occurred only at low temperatures (Ref. 10). The authors thank M. D. Galanin for his interest, N. V. Kostin for help in measurements, and M. I. Gostev for help in preparation of phosphor monocrystals.

Card 5/6

51-4.-1-19/26

Absorption and Luminescence Spectra of Indium-Activated Alkali-Halide Monocrystals.

There are 3 figures, 1 table and 10 references, of which 6 are Russian, 3 German and 1 English.

ASSOCIATION: Physics Institute imeni P. N. Lebedev, Academy of Sciences of the USSR; All-Union Institute of Mineral Raw Materials. (Fizicheskiy institut im. P. N. Lebedeva AN SSSR; Vsesoyuznyy institut mineral'nogo syr'ya.)

SUBMITTED: April 11, 1957.

AVAILABLE: Library of Congress.

1. Alkali halide crystals-Absorption
2. Alkali halide crystals-Luminescence spectra

Card 6/6

84606

S/181/60/002/010/029/051
B019/B056

247700 (1043 on 12)
AUTHORS:

Shamovskiy, L. M., Dunina, A. A., and Gosteva, M. I.

TITLE:

The Energy of the Thermal Dissociation of the F-Centers
in KCl

PERIODICAL:

Fizika tverdogo tela, 1960, Vol. 2, No. 10, pp. 2526 - 2535

TEXT: This article was read at the Soveshchaniye po fiziki shcheloch-nogaloidnykh kristallov (Conference on the Physics of Alkali-halide Crystals), which took place in July 1959 at Tartu. In the introduction, the results obtained on the semiconductor properties and luminescence of crystal phosphors are discussed. Among other papers, those of S. I. Pekar (Ref.2) are mentioned. For the further development, the authors suggest investigating the equilibrium concentration of the conduction electrons in colored crystals, which have a high F-center concentration compared to that of the equilibrium-structural defects. This permits the exact determination of n-type conductivity of crystals with and makes it possible to calculate the thermal ionization

84606

The Energy of the Thermal Dissociation of the F-Centers in KCl S/181/60/002/010/029/051
B019/B056

for the electric conductivity: $\sigma = ev_e n_F \exp(\Delta S/2k) \exp(-\xi_F/2kT)$. Thus, they obtain for the mean value of thermal dissociation energy $\xi_F = 2.05$ ev. For the n-type conductivity of the samples quenched at 550 and 600°C, the authors obtain the formula

$\sigma = ev_e n_F^{1/2} 5 \cdot 10^7 T^{3/4} \exp(-\xi_F/2kT)$. There are 1 figure and 18 references: 8 Soviet, 3 US, 1 Czechoslovakian, 3 German, and 1 Dutch.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya (All-Union Scientific Research Institute for Mineral Raw Materials)

SUBMITTED: November 16, 1959

Card 3/3

L 31036-66

ACC NR: AP5027670

SOURCE CODE: UR/0051/65/019/005/0776/0782

AUTHOR: Shamovskiy, L. M.; Dunina, A. A.

ORG: none

TITLE: Growth of initial brightness of roentgenoluminescence in an alkaline-halide luminophor during repeated excitation

SOURCE: Optika i spektroskopiya, v. 19, no. 5, 1965, 776-782

TOPIC TAGS: luminescence, sodium chloride, potassium bromide, ionization, luminophor, F band, x ray irradiation

ABSTRACT: This work is a continuation of the authors' previous investigations (Opt. i spektr. 18, 637, 1965, Opt. i spektr. 18, 874, 1965, and 18, 1011, 1965) on the roentgenoluminescence of an X-ray-irradiated luminophor. The effect of an additional short illumination from F-bands on the stationary luminescence brightness was studied to interpret the phenomenon. Crystals of NaCl, KBr, and NaBr, activated by In^{3+} ions were used in the study. The authors detected an increase in the initial brightness of the roentgenoluminescence during repeated excitation of luminophor KBr (In^{3+}) at -20, -35, -45, and -58C. In all cases the duration of interruption between repeated excitations did not affect the brightness of subsequent roentgenoluminescences. The additional illumination from F-bands affected the roentgenoluminescence of crystals in three ways: (1) it caused a rapid growth of luminescence brightness; (2) it

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UDC: 537.531 : 535.37

L 31036-66

ACC NR: AP5027670

0
resulted in intensification of external extinction, and (3) it stimulated luminescence by sensitizing the liberation of vacancies from the thermally stable V-centers. Therefore, the additional short illumination affected the stationary brightness of roentgenoluminescence differently. Additional illumination produced a flash caused by the sharp increase in the concentration of atomic centers of luminescence. The transition of electrons from the donor levels into luminescence centers, caused by added illumination, was a very rapid process. The initial amplitude of the flash depended on the density of F-centers and the concentration of small V-levels. It depended, therefore, on the duration of a preliminary X-ray excitation of the luminophor. A sensitizing luminescence began already after extinction of S accumulated in the luminophor in the small V-levels. The F-centers became "rigid" and the repeated capture of electrons by anion vacancies promoted the liberation of vacancies from the V₂-centers. The stationary density of vacancies in the valent zone was small. The vacancies were thus arranged effectively with electrons localized in the activated luminescence centers. These conditions controlled the three subsequent stages of the effect of additional F-illumination. The luminophor in NaBr(In³⁺) in an excited absorption spectrum could generate only V₃-centers which were thermally more stable than the F-band. In this case, an additional illumination in the F-band did not effect the optical flash, the extinction of the light sum, nor the rise in roentgenoluminescence, because the repeated capture of electrons did not affect the decomposition of the V₃-centers. This also suggested that ionized luminescence centers were not formed during X-ray excitation of the luminophor. Orig. art. has: 4 figs.

SUB CODE: 20/ SUBM DATE: 18Nov63/ ORIG REF: 011
Card 2/2 LC

ACC NR: AP7001327

SOURCE CODE: UR/0371/66/000/005/0015/0019

AUTHOR: Chernyak, V. G. — Cernaks, V.; Dunina, A. A. — Dunina, A.; Larionov, M. G. — Larionovs, M.; Plyavinya, I. K. — ~~PIAVINA, I.~~; Shamovskiy, L. M. — Samovskis, L.; Tale, A. K. — Tale, A.

ORG: Physics Institute AN LatSSR (Institut fiziki AN Latv. SSR)

TITLE: Photoscintillations of KCl-Tl excited in the F-band

SOURCE: AN LatSSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 5, 1966, 15-19

TOPIC TAGS: scintillation, light excitation, excitation spectrum, *f band*

ABSTRACT: An investigation was made of the rapid transfer of energy from F-centers to activator centers and of the time necessary for such transfer when the crystals are subjected to pulsed excitation. The investigation was based on the comparison of the kinetics of activator luminescence excited directly in the center of luminescence (Tl-scintillation) and in the F-absorption band (F-scintillation). KCl-Tl-F crystals (0.2 or 0.5 mol% Tl in melt) were irradiated with x- or gamma rays. The concentration of F-centers did not exceed $5 \times 10^{17} \text{ cm}^{-3}$. The crystals were placed in a metallic cryostat and excited with light pulses ($\sim 10^{-7}$ sec) from a spark. The excitation was applied alternately in the 247 and 560 nm bands. A coincidence was found between F-scintillation and Tl-scintillation with regard to their time

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ACC NR: AP7001327

characteristics in the range from room temperature to the temperature of liquid nitrogen. The time characterizing the slow exponential decay τ_{LC} (LC-long component) in F-scintillations changed from 2.5×10^{-7} sec to 5×10^{-5} sec with a change in temperature from 300 to 80K. At low temperatures, a sharp emission (short component-SC) of luminescence occurs which describes the form of the exciting spark pulse, as in the case of Tl-scintillation. The ratio of quantum yield of SC and LC of F-scintillation is the same as for Tl-scintillation in the entire range of measured temperatures, which shows that the overpopulation of the 3P_1 level with respect to the 3P_0 level at F-scintillation is the same as in the case of Tl-scintillation. The SC and LC of luminescence in F-scintillations relate to the activator luminescence of KCl-Tl, i.e., to the 305 nm band, but not to the 335 nm band, which corresponds to the hole centers. The maxima of the excitation spectra of F-scintillation and absorption spectra coincide and are in the region of 560 ± 5 nm. From the experimental results, it follows that the mechanism of F-scintillation formation is of the electron type. This means that during short-time crystal excitation in the F-absorption band, free electrons, which are generated in the conductivity zone, recombine with holes, which are localized due to x- or gamma-irradiation on the activator ion or close to it. This process is accompanied by the excitation of the activator. Orig. art. has: 2 figures. [JA]

SUB CODE: 20/ SUBM DATE: 06Dec65/ ORIG REF: 007/ ATD PRESS: 5109

Card 2/2

SOKOL'SKIY, D.V.; DUNINA, L.P.

Hydrogenation of sodium propiolate on skeletal nickel catalyst.
Izv. AN Kazakh. SSR. Ser.khim. no.1:55-64 '58. (MIRA 12:2)
(Propiolic acid) (Hydrogenation) (Catalysts, Nickel)

DUNINA, L. P.

5-2200

Translation from: Referativnyi zhurnal, Khimiya, 1959, Nr 7, p 73 (Ukrz)

AUTHORS: Solov'ev, D.V., Shumina, V.P., Kopylov, P.A., Pivovarov, V.I., Dunina, L.P.

TITLE: The Investigation of the Liquid-Phase Hydration of Acetylene According to Kucherov. I. The Effect of the Composition of the Catalytic Solution on the Course of the Reaction

PERIODICAL: Tr. Inst. khim. nauk. AS Kazan, 1958, Nr 2, pp 158 - 172

ABSTRACT: The hydration of C_2H_2 was studied by passing it through a sulfuric acid solution of H_2SO_4 and $Pb(SO_4)_2$, depending on the composition and the temperature of the solution, the rate and the duration of passing C_2H_2 through the solution. The loss of catalytic activity of mercury compounds in the course of the process is caused by reducing them to mercury metal with its removal from the solution. In the absence of oxide from the deactivation of the catalyst takes place more quickly, the introduction of $Pb(SO_4)_2$ into the solution, the removal of mercury from a solution in a more dispersed state, inhibits its reduction, increasing the reaction rate. The

Card 1/2

optimum passing rate of C_2H_2 at $95^\circ C$ is 3.1 ml/min per 1 ml of constant solution, the optimum temperature is $75^\circ C$. The presence of $Pb(SO_4)_2$ is necessary even in the presence of an intermediate compound formed of the constant solution. In the case of a change in the concentration of the constant solution, the yield of acetaldehyde passes through a maximum corresponding to $95^\circ C$ solution, the yield of 23.8% H_2SO_4 and 10% $Pb(SO_4)_2$; the highest productivity is attained in a composition of 13.7% H_2SO_4 and 17% $Pb(SO_4)_2$. The introduction of small quantities of chlorine reduces the total yield of CH_3CHO leading to a maximum. The addition of small quantities of CCl_4 , CCl_2 , C_2Cl_4 increases the yield of CH_3CHO ; chloroacetic compounds, as well as HCl taken in large quantities, exert a negative effect. The maximum yield of CH_3CHO increases the yield less than average, the maximum beginning of the reaction the CH_3CHO yield is hours, which is due to the initial stage of the reaction and the subsequent decomposition of intermediate products; later on the yield decreases again due to the intensification of side processes.

Card 2/2

3. Kiperman

DUNINA, L.P.

PHASE I BOOK EXPLOITATION SOV/3537

Akademiya nauk Kazakhskoy SSR. Institut khimicheskikh nauk

Trudy, t. 5 (Transactions of the Institute of Chemical Sciences, Kazakh SSR, Academy of Sciences, Vol 5) Alma-Ata, Izd-vo Akademii nauk Kazakhskoy SSR, 1959. 154 p. 1,000 copies printed.

Ed.: M.D. Zhukova; Tech. Ed.: Z.P. Borokina; Editorial Board of Series: D.V. Sokol'skiy (Resp. Ed.), V.G. Gutsalyuk, and A.V. Surorov (Resp. Secretary).

PURPOSE: This collection of articles is intended for personnel of scientific research laboratories, laboratories of industrial enterprises, and faculty members of schools of higher education.

COVERPAGE: The collection reviews problems of liquid-phase catalytic hydrogenation to upgrade and reactivate various products. Hydrogenation of unsaturated bonds of various types, adsorption of hydrogen on different catalysts, chromatographic separation of mixtures, and the effect of halogen salts of alkali metals on the rate of hydrogenation reactions promoted by various skeleton catalysts are described. Conditions of catalytic hydrogenation of natural fat, sunflower oil, and such synthetic products as esters of high-molecular fatty acids are set out. Dehydration of the butane fraction carried out in combination with isomerization is analyzed. Principles of selecting catalysts and reagents generating them are reviewed and the formation of adsorption potentials on metal catalysts is explained. Each article presents conclusions drawn on the basis of experimental findings. References accompany most of the articles.

Shomonina, V.P., R.M. Khasanova, and D.V. Sokol'skiy. Chromatographic Separation of Mixtures of Nitrobenzene-Aniline Products	28
Goledova, I.S., and D.V. Sokol'skiy. Study of Hydrogenation Reactions of Natural Fats and Their Simplest Synthetic Analogues, the Esters of High-Molecular-Fatty Acids	36
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Pl.4. R.M. [Moskovskiy Institut tonkoy khimicheskoy tekhnologii] and M.V. [Lomonosova-Moscow Institute of Fine Chemical Technology local M.V. Lomonosov]. Some Principles of Selecting Catalysts for Liquid-Phase Hydration of Acetylene to Acetaldehyde	81
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DUNINA, L.P., Cand Chem Sci - (diss) "Hydrogenation of sodium propiolate on nickel, platinum and palladium in various solvents," Alma-Ata, 1960, 19 pp (Institute of Organic Chemistry imeni N. D Zelinskiy, Academy of Sciences USSR) (K1, 39-60, 114)

SOKOL'SKIY, D.V., akademik; DUNINA, L.P.

Comparative hydrogenation of sodium propiolate on Pt, Pd, and Ni catalysts. Dokl.AN SSSR 132 no.5:1111-1113 Je '60.
(MIRA 13:6)

1. Kazakhskiy gosudarstvennyy universitet im. S.M.Kirova.
Akademiya nauk KazSSR (for Sokol'skiy).
(Propiolic acid) (Hydrogenation)
(Catalysts)

DUNININ, S. S.

PHASE I BOOK EXPLOITATION SOV/3685

Moscow. Institut khimicheskogo mashinostroyeniya

Teplovyye protsessy v promyshlennosti (Thermal Processes in Industry)
Moscow, 1958. 145 p. (Series: Its: Trudy, t. 16, No. 2) 1,500
copies printed.

Resp. Ed.: S.N. Shorin, Professor; Tech. Ed.: B.K. Shorin; Editorial Board: S.I. Shchepkin, Professor, Honored Worker in Science and Technology (Resp. Ed.); A.M. Lastovtsev, Professor; N.M. Karavayev, Professor; D.T. Kokorev, Docent; L.V. Petrokas, Professor; P.M. Reshchikov, Docent; S.N. Sokolov, Professor; S.I. Sokolov, Professor; A.M. Khodzhayev, Docent; S.N. Shorin, Professor; N.I. Basov, Candidate of Technical Sciences (Scientific Secretary).

PURPOSE: This collection of articles is intended for physicists, chemical and industrial engineers, and technicians interested in problems of thermodynamics and fuel combustion in various industries.

COVERAGE: The book contains 11 articles which give the results of
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Thermal Processes in Industry

SOV/3685

research on heat convection, combustion dynamics, fuel economy, and the mechanization of heating processes. No personalities are mentioned. References accompany some of the articles.

Sokolov, A.A. Study of the Heat Convection of Molten Glass in Tank Furnaces With Computations Based on a Model	3
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- Pinayev, A.V., and I.B. Zhilinskiy. Experiment in the Use of a
Coil-Type Heat Exchanger in the Production of Resins 71
- Volkov, M.A. Persistence and Effectiveness of the Combustion of
Low BTU Gases in Ceramic Burners 83
- Zarudnyy, L.B., S.S. Duninin, and R.S. Nesiolovskiy. Overall
Mechanization of the Furnace Process With Burning of Fuel in a
Bed 103
- Avetisyants, L.B. Burning Gas Used for Blow-Down of Water Gas
Generators 121
- Zhilinskiy, I.B. Problem of Methods for Computing the Economic
Efficiency of Steam Power Plants 141
- AVAILABLE: Library of Congress

Card 3/3

TM/jb
5-26-60

. DUNINOWNA, HELENA.

Niespodzianki warszawskie. Warszawa, Czytelnik, 1956. 337 p.
(Warsaw surprises).

MLDW

Not in DLC

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

SOV/137-59-3-7236

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 326 (USSR)

AUTHOR: Dunishchev, P. D.

TITLE: Valveless Automatic Device for Maintaining the Level and Acidity of an Electrolyte (Besklapannoye avtomaticheskoye ustroystvo dlya podderzhaniya urovnya i kislotnosti elektrolita)

PERIODICAL: Sb. nauchn. soobshch. Saratovsk. avtomob.-dor. in-t, 1958, Nr 11, pp 31-33

ABSTRACT: It is noted that in hot steel-plating chloride electrolytes, which have a temperature of 80-95°C, there occurs a continuous evaporation of water and, consequently, a change in the concentration of Fe. There is a simultaneous decrease in the concentration of HCl which is lost through evaporation and the chemical reactions during the electrolysis. Such changes in the composition of the electrolyte result in changes in the properties of the plating. Under a stabilized procedure the hourly loss of water and HCl would be constant. Automatic addition of acidulated water can maintain a constant level of the electrolyte and acidity of the solution. The author offers a simply designed valveless automatic regulator to be used in industrial steel-plating apparatus. A. L.

Card 1/1

DUNJANOVIC, Petar, dr., Zemun

Admission department in the hospital. Narodno zdrav., Beogr. 10
no.10:294-297 1954.

(HOSPITALS

planning, admission department)

DUNJIC, R.

DUNJIC, R. and JOVANOVIĆ, R.

"Phytocenosis of Oak Forests in the Area of the Jasenica River and in the
Environs of Belgrade" p. 203
(ZBORNIK RADOVA, Vol. 11, no. 2, 1951, Beograd, Yugoslavia)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2,
No. 10, October, 1953, Unclassified

TODOROVIC, Vladimir, sanitetski potpukovnik d-r; DUNJIC, Slobodan, sanitetski
potpukovnik d-r

Surgical therapy of trochanteric fractures. Voj.san.pregl.,
Beogr. 17 no.4:434-438 Ap '60.

1. Klinika za hirurske bolesti.
(FEMUR NECK fract. & disloc.)

PISCEVIC, Stanislav, sanitetski pukovnik, dr.; DANJIC, Slobodan, sanitetski
pukovnik, dr.; MIHALJOVIC, Dragoljub, sanitetski pukovnik, dr.;
KRASOJEVIC, Dragoljub, sanitetski kapetan, dr.

A case of combined injuries with severe hemorrhage. Vojnosanit.
pregl. 21 no.4:253-256 Ap '64

1. Vojnomedicinska akademija u Beogradu, Klinika za hirurske
bolesti.

DUNJIC, S., sanitetski pukovnik, dr.; JOVANOVIĆ, Z., sanitetski kapetan
I. klase, dr.

Multiple fractures of long bones. Vojnosanit. pregl. 21 no.11:
719-724 N '64

1. Klinika za hirurske bolesti, Vojnomedicinska akademija u
Beogradu.

JOVANOVIĆ, Zivko, sanitetski major dr.; DUNJIC, Slobodan, sanitetski pukovnik dr.

A case of isolated fracture of the femur followed by comatose state and heterotopic ossification in the region of the uninjured knee. Vojnosanit. pregl. 22 no.9:563-565 S '65.

1. Vojnomedicinska akademija u Beogradu, Klinika za hirurske bolesti, Traumatolosko odeljenje.

ZAJIC, Zivorad, sanitetski potpukovnik dr.; DUNJIC, Slobodan, sanitetski
pukovnik dr.

Fractures of the patella. Vojnosanit. pregl. 22 no.12:766-774,
D 165.

1. Vojnomedicinska akademija u Beogradu, Klinika za hirurske
bolesti.

ANDRYUSHCHENKO, O.N.; PASHIN, V.I.; DUNKE, N.A.

Natural conditions in fish hatcheries of White Russia. Trudy Biol.
sta. na oz. Naroch' no.1:37-53 '58. (MIRA 12:7)
(White Russia--Fish ponds)

DUNKE, N.A.

Natural food supply of fishes and feeding of the young of lavarets
in White Russian fish hatcheries. Trudy Biol. sta. na oz. Naroch'
no.1:55-78 '58. (MIRA 12:7)
(White Russia--Whitefishes) (Fishes--Food)

DUNKE, N.A.; DOROZHKIN, Yu.N.

Research on the effectiveness of mineral fertilizers in experiment
ponds of the "Shemetovo" Fish Farm. Trudy Biol. sta. na oz. Narech'
no.1:131-142 '58. (MIRA 12:7)

(Fish ponds) (Zooplankton)

~~THINK~~ ~~By~~ ~~...~~

Research on the effectiveness of mineral fertilizers in experiment ponds of the "Shemetovo" Fish Farm. Report No.6: Zooplankton and benthos of the experiment ponds in 1955 and feeding of the young of Amur Carp. Trudy Biol. sta. na oz. Narech.' no.1:143-162 '58.
(MIRA 12:7)

(Fish ponds) (Fresh-water fauna) (Carp)

DUNKE, N. A., Candidate Biol Sci (diss) -- "The hydrobiological conditions of raising young useful fish in industrial fish cultivation in the Belorussian SSR". Minsk, 1959. 14 pp (Min Higher Educ USSR, Beloruss State U im V. I. Lenin, Chair of Zool of Invertebrate Animals), 150 copies (KL, No 26, 1959, 124)

DUNKE, V.

Lower the incidence of disease in the district. Zdrav. Belor. 6
no.3:22-24 Mr '60. (MIRA 13:5)

1. Glavnyy vrach Sirotinskogo rayona.
(SIROTINO DISTRICT--PUBLIC HEALTH, RURAL)

DOLZHENKOV, A.Ye.; DUNKE, V.G.

Recovery following massive hemorrhage. Zdrav. Bel. 6 no.12:56-57
D '60. (MIRA 14:1)

1. Iz Sirotinskoy rayonnoy bol'nitsy (zaveduyushchiy khirurgicheskim otdeleniyem A.Ye.Dolzhenkov). 2. Glavnyy vrach Sirotinskogo rayona (for Dunke).

(HEMORRHAGE)